- 2. Fumigation.—After the death or removal of the consumptive patient the house is reported for fumigation to the city Health Department. In reporting such houses the amount of fumigation required is specified (whether whole house or only one or two rooms).
- 3. REGISTRATION OF CASES.—All cases given to the nurse after the physician's diagnosis are reported by her to the State Board of Health, which provides the association with all supplies (napkins, cups, etc.) which are needed for distribution among these patients.

SAVING OF WAGE-EARNERS.—A quarter of the number of cases under this supervision have been able to return to work, if not to their former employment, at least to some modified form of work. These cases are not physical but economic cures, who have been able to return to work after being under supervision or treatment from periods varying from several weeks to as many months. Sufficient time has not as yet elapsed to judge of the permanence of these cures, but from a wage-earner's standpoint they are satisfactory, and would probably not have occurred without the care and supervision of the nurse.

## THE ORIGINS OF MEDICINE \*

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The study of origins is always interesting, but often not particularly flattering to our pride. Proud humanity has always hated to acknowledge its descent from the mudfish. Just as a too nice inspection of the pedigrees of our most illustrious colonial dames reveals that their Revolutionary ancestors were drummer boys or hostlers in Washington's army, so the following back of the pedigree of even our most impressive and illustrious institutions is apt to land us in the very humblest of antecedents. But there is nothing whatever to be ashamed of in these as long as they were doing their best in their time and place, and the chastening reflection will occur that our own descendants will probably be ashamed of us as we are of our humblest ancestors.

These considerations are peculiarly apropos with the study of the origins of that noble and illustrious science of which the nurse and the

<sup>•</sup> The annual oration delivered at the seventh annual commencement of The Training-School for Nurses of the California Hospital, Los Angeles, June 7, 1905.

physician are alike the devotees. This, though,-tracing us back to such an antiquity as is wrapped up in the deepest mystery, like the ancestry of the very classic Jeems De la Pluche,—shows three distinct roots or stems. The first of these is for medicine proper as distinguished from surgery, whose earliest prototype is clearly enough that grotesque but picturesque individual known to this day among our own local aborigines as "The Medicine Man," "The Shaman," "The Voodoo." But we have not to bear the shame of our descent alone, for another even more proud and illustrious profession-the clergy-is equally descended from the same amusing individual; in fact, science and religion are descended from one common ancestor, which is probably the reason they hate each other at times so cordially. The practice and therapeutics of this remarkable individual had at least the merit of being perfectly simple. They were based upon his pathology, which consisted in the belief that diseases were due to possession by evil spirits, a remnant of which belief clearly persisted as late as the days of Jesus of Nazareth, when epileptics and the insane were described and treated as possessed with devils.

Naturally, the simplest thing was to make it so uncomfortable for the spirit that he would promptly quit the premises. This is the explanation of the beating of drums and incantations and sounding of trumpets which were the chief reliance of the primitive Medicine Man, and, what has persisted to a later day, the administration of bitter, nauseous, and otherwise abominable messes to the patient. You think that has all died out in this twentieth century, but did you ever hear of cannon being fired to raise the body of one who had been drowned? This is purely and simply to scare away the water sprite or Nixie, who has pulled the drowned man under, to make him release his hold, although we have invented a pseudo-scientific, modern explanation on the ground that the jar of the explosion loosens the body from beneath the snag. Of the bitter and nauseous medicine superstition we have, alas, abundant survivals, as most of us past forty years of age can testify from painful personal experience. Almost anything that tastes nasty is supposed to be good for medicine. Household medicine, of course, is in that stage as yet, and the horehound and boneset and camomile and other abominable teas, are clear survivals of demonism, as anyone who has ever tasted them will cheerfully testify. Their real curative value consists in the large quantities of hot water with which they have to be washed down and the profuse perspiration which this induces, but the original plan on which they were selected was precisely that described by one of Frank Stockton's never-to-be-forgotten heroines, who said she had "tried almost every possible yarb and other remedy for the cure of her husband's favorite ailment, and had only found one which was a certain cure, and that one always worked, no matter how bad he might be when he tuk it. Within twenty minutes afterwards he did not know there was anything the matter with him 'ceptin' a bitter taste in his mouth." And while I would not dare to say so in public, yet to so highly and scientifically trained an audience as this I don't mind confessing privately, as it is coming to be an open secret in the profession, that most of our so-called bitter tonics, like quassia, gentian, strichnia, and quinine (elsewhere than in malaria), have their sole virtue just about where the good lady's "yarb tea" had,—namely, in their bitter taste. If anyone can tell me of any other I shall be greatly obliged to him. They are supposed to give one an appetite, but I frankly believe that that is only by making anything else that comes afterwards taste good by contrast.

There is another survival of the magical in medicine which is to me of considerable interest, and that is the curious sign which you see placed at the head of a prescription. We have now mutilated it and rationalized it into a capital R with a stroke across its last flourish, and we glibly inform the neophyte in medicine, as also in nursing, that it stands for the Latin "recipe," which is being interpreted-"Take"of the following ingredients so and so much. This, however, is a pure invention, and if any of you will take the trouble to look up a German or English prescription blank, or even an American one of more than thirty years ago, you will find that this character bears no real resemblance to any letter whatever, but is a purely arbitrary sign; and if you will turn to your astronomies you will find that it is simply the zodiacal sign of the God Jupiter, the patron deity of physicians, whose blessing is invoked thereby upon the following prescription. And God knows that some of the prescriptions I have seen need this divine assistance badly enough. In fact, our whole edifice of even modern medicine is riddled through and through with traces of its origin from pure magic, and nothing but a reasonable regard for your patience prevents me from giving a dozen other illustrations. However, fortunately, we long ago turned over the magical spirit to the other branch of our common ancestry, the clergy, and are now, in name at least, upon a rational basis. I think I hear my surgical brethren of the audience chuckling to themselves: "Oh, yes! that is quite true of the medical man pure and simple; he is a hoo-doo, of course; we always knew it, but we have sprung full armed from the head, Minerva-like, of Jove. and are purely modern, a strictly rational product." Who do you suppose was the original ancestor of that proud corrector of the mistakes of Providence, the modern surgeon? No more and no less an illustrious individual than the common barber and corn-cutter. In fact, his name, which comes from the French chirurgeon (meaning handworker), is not only of the same derivation, but of common ancestry with chimpodist. For a long time he was regarded as an inferior caste in the profession itself, and to this day in England the surgeon proper is not allowed to call himself "doctor," but is confined to the plain title "Mr." In the complicated code of British society the doctor is regarded as a gentleman, while the surgeon is not necessarily so. I dare say many of you will recall reading in any of the old biographies or plays that when any blood-letting or anything of that description is to be carried out the barber or the leech is called. But even from such a purely day-laborer origin as this surgery has not entirely escaped its priestly and magic origin. The ancient and abominable blood-letting which used to be practised, with and without reason, on every possible occasion, is a pure survival of the idea that something must be done to render untenable the further residence of the diseased demon in the body of the patient. The lancet, bleeding and calomel were pure survivors of demonism,-ghastly, degrading, and utterly harmful superstivivors of definitions,—and it is simply absurd, if not positively hypocritical, to attempt to defend them on any rational grounds. They did harm, and little else but harm, and as many lives have probably been sacrificed upon their bloody altars as upon those of any other religion. The ancient chirurgeon emphatically believed that without shedding of blood there is no remission, and the laity are sometimes unkind enough to say that he has not quite escaped from a slight influence of that belief even at the present day.

These two curious origins will go far to explain the singular terms of contempt or dislike with which the medical man is almost invariably referred to in dramatic and historic literature until within the last fifty years. Molière, you will remember, pours the bitterest vials of his scathing sarcasm upon the medical charlatan, whom he evidently regards as the dominant type of the profession. Shakespeare seldom refers to the leech or the surgeon except in such terms as might be applied to a footman or groom. Indeed, in many instances he evidently regards them as rank impostors dealing in charms and spells and practising upon the credulity of the people. This attitude towards the profession in literature is one of the most painful and humiliating things to the educated physician of to-day, his only comfort being that the priest is not treated much better. One thing, however, has always been to the

credit of surgery, and that is that its attitude was emphatically that typified by the native of the great State which has its capitol in St. Louis -"that he had to be shown." He has never been half so credulous as the medical man, and has stood for a stricter form of the rational, purely scientific spirit. I sometimes think that his rationalism, however, admirable though it be, is carrying him to-day a trifle too far, and that he is using his scalpel to save his brains. In diseases particularly of the abdomen we are getting much into the habit of saying, "I will make no diagnosis, except that there is trouble in the northeast or southwest quadrant, as the case may be, and I will go in and find out what it is," first taking a roving commission from the patient to abate any nuisances which he may discover in the course of his investigations. One of my medical friends who had been recently submitted to a serious gastrointestinal operation informed me in strict confidence, in which same spirit I hand it on to you, that in his mind surgeons were getting to be little better than intestinal plumbers, but I am sure his judgment was too harsh. However, I fear that if the present trend of affairs persists it will be quite possible after death for the expert neurologist to distinguish between the brain of the surgeon and that of the physician by simply turning to the cerebral centre of the reasoning powers and noting the bump that is present in one case and the depression which exists in the other.

Finally, after the errors of barbarism and the ignorance of the ages have been slowly shed off scale by scale, the third and highest source of origin of our illustrious joint profession emerges, and that is the department of trained nursing. Here it is just as true as in Burns's celebrated lines on "The Garden of Eden," that

> "When Nature first began to plan Green grew the rashes, oh! Her 'prentice hand she tried on man, And then she made the lasses, oh!"

Time's noblest product is here, as usual, the last, and while your profession was not fully recognized as the peer of the others until comparatively recent years, it has an antiquity that goes back farther than any of them, and a nobility which throws them both in the shade. Just as soon as the light of maternal affection dawned in the kindling eye of the earliest bird or the most primitive animal as she gazed upon her triumph—the new-born young—there was born the spirit of the nursing profession. Long before there was a doctor there was a nurse, and to her is due more than to any other influence the survival of the

human race, in spite of both the medicine man and the surgeon. Based upon the purest and most self-forgetful feelings, the longing of the mother to comfort her sick child, and the father to restore his wounded young, is alike the highest, the purest, the sanest, and freest from excesses and errors of every sort, of any of the branches of the great healing art. The nurse alone in the art of healing has culled no deadly poisons from dew-covered herbs by moonlight, has brandished no bloody scalpel, but has relied upon the gentle, soothing, rest-giving forces of nature, which in the long run are infinitely more powerful. It is no mere coincidence that the development of the trained nurse was absolutely contemporaneous with the advent of the rational, respect-fornature spirit in medicine. No longer is nature to be dosed and carved and deprived of her natural demands in the way of water and coolings in the time of fever, but her indications are to be watched and, as far as possible, followed. In other words, Nature is to be trusted, instead of hated and despised with a Puritanic vigor. Rest, food, the open air, the sunlight, the sparkling water, internally and externally, are to be substituted for calomel, jalap, aloes, and henbane. After centuries upon centuries of fighting nature under the impression that she is trying to land our loved ones in their graves, we have swung round to recognize that her tendency is towards recovery if we will only not interfere with her. Someone has put in the mouth of an applicant for a licentate's degree, in answer to what was the first duty of the physician, the words, "To find out what will harm the patient, and then not give it," and it is not an inapt description of the attitude of modern medicine. Instead of indiscriminate drugging, bathing; instead of bleeding, feeding; instead of piling on blankets and shutting the windows tight in fever, cool packs and wide-thrown sash; in other words, we are endeavoring to intelligently work with and assist nature instead of fighting against her. Not that I would by any means decry the use of drugs and the resort to the knife. Far, far from it. One is indispensable, the other absolutely necessary. By the intelligent use of both, recovery can be hastened, pain diminished, injurious effects minified, and the recuperating powers of nature assisted and strengthened in every way. It is merely that instead of feeling when we are called into a case that we must instantly jump in and do something to save the patient's life, we quietly inquire into the natural history of the disease, what nature is doing to improve the condition, and limit the damage, and then fall in with her suggestions as completely as possible. For fevers, packing, bathing, sponging, and, wherever we possess them, the use of those supreme remedies of nature which she manufactures in the tissues of every patient in sufficient amounts if she can—the antitoxins, or healing serums. Nowhere is to be found a more brilliant illustration of the way we are now taking leaves out of Nature's book and endeavoring to fight the battle with her own weapons than the use of these wonderful and most valuable weapons, the antitoxins. The medical profession balanced upon two feet, vizly, medicine and surgery, while it has done some yeoman service, still stood uncertainly. The third foot, nursing, places it upon a tripod and makes its stand as firm as that of the everlasting hills.

So much for the past. Now, what developments may we look for in the future? It goes without saying, of course, that our patient study into the causes of things is going to give us an enormously increased control over disease in the realm of preventive medicine. It certainly is not too much to expect that while hitherto we have been restricted to the exploitation of the reactive powers of our own tissues against infection and its products, bacteriology will soon discover for us other bacteria or organisms hostile to those of disease, that just as in the kindred realm of horticulture, wherever a bacterial pest is found search is made immediately for another bacterium or insect which will attack and destroy the first. Striking illustrations in point are the discovery of the Japanese little beetle, or lady-bird, which destroys the larva of the deadly San José scale, and in more recent years of the little black ant of Central America-the Kelep, whose favorite meal is the larva of the cotton-boll weevil. May we not hope that bacteriology may one day find a bacterium or mould capable of destroying the tubercle bacillus in our tissues, or another protozoon capable of destroying the hematozoon of malaria. There are those who are sufficiently light-minded to demand of bacteriology excursions into other fields than those which she now occupies. For instance, one profane jester has declared that he thinks that it is the duty of our laboratory men to, if possible, discover a microbe with which the early morning train can be inoculated in such quantity as to make it so infectious that one cannot help catching it. But this is possibly a trifle beyond their powers. In the realm of surgery it seems not improbable that we shall continue to remedy the oversights of the Creator and make good His absent-mindedness by the prompt removal of a number of odds and ends-bargain-counter remnants, so to speak-which have been carelessly left in the modern human body long after they have survived their usefulness. It does not seem improbable that at some not distant day every child born of intelligent parents will be submitted to a sort of surgical housecleaning, say at about the age of seven or eight years, have his tonsils trimmed out, his appendix removed, his gall-bladder excised, and, in the case of a female, the entirely superfluous fifth digit upon the foot amputated for the purpose of enabling the fashionable type of shoe to be worn without pain. The removal of the gall would certainly be a great improvement to many individuals of our acquaintance, and if at the same time something could be done to correct the excessive mobility of the linguistic organ of the gentler sex the surgeon would lay the human race under a lasting debt of gratitude. Metchnikoff has gone even further than this, declaring that the whole large intestine is a survival of former herbivorous days, and is no longer of value to the human organism and might be with benefit removed. On the other hand, the stomach is little more than the fermentation basin in the course of the alimentary canal. The same line of argument will equally apply to the teeth, which are mere grinders and tearers, now rendered almost entirely superfluous by the introduction of the steel roller, the carvingknife, the cook-under-hash machine, and last, but not least, the breakfast food. Suppose we were to have all these three sets of superfluous organs removed, and thus be rid at one stroke of toothache, stomachache, and colic, what a heaven upon earth this old world would become. In the meantime, while waiting for these really radical and important reforms to be carried out, all we can do is to correct the few of the minor mistakes and inconsistencies that remain, and in these the nursing profession is both our most dreaded critic and our most valued assistant. There was a time when we doctors were monarchs of all we surveyed. The patient, of course, could not talk back, because we could tell him at once that he was not a judge of his own symptoms. The family could only judge of our competence to handle the case by the gross results, of whether the patient got better or died. The outside world either praised us for recoveries which we knew we had nothing to do with, or, on the other hand, denounced us for having lost cases which the Archangel Gabriel himself could not have prevented passing to the Kingdom Come, and we were so often equally unjustly praised or unjustly blamed-either we could raise the dead or we were not to be trusted to "doctor a cat," that we came to have a fine disregard for popular opinion. But another influence has entered on the scene. Quiet, low-voiced, deft-handed, light-footed, but with the other quality which invariably accompanies this rather feline group—an eye that nothing escapes. This person, the only one that we are afraid of, is the nurse. She does not say much, but her look can express volumes. When we have made a fool of ourselves in a case we know it, and we know she knows it, although she never says a word. If she has confidence in us,

we have to do the very best we know how in order to continue or preserve her approval; if she has not, though she may never manifest this by either word or sign, we know it just the same. When it occurs we will strain our last bronchiole in order to retain her skilled approval. When the nurse says we have done well in a case, we know we have, but when she maintains a polite reticence as to her views upon the manner in which it has been conducted we shudder to our very backbones. It has only one drawback, it places us under the dominion of the only master that we are really afraid of ; the only God that man ever really worshipped-woman. It has long been an open secret under whose hopeless domination we unfortunate males are within the haven of our own homes, but we now find ourselves under that gentle and beneficent but relentless sway in our profession. We cannot even escape from it in our offices, for there our stenographer rules us to our own benefit with a rod of iron, and the nineteenth century closed and the twentieth century is dawning with a more devoted and hopeless subjugation of man than is dreamed of even upon woman suffrage platforms. Our only appeal to you is to use your power gently. Don't be too stern with us, and we will do the best we can to come up to your level. In the meantime, there are a few suggestions for our own protection, and, we sincerely believe, for your welfare, which we would hesitatingly and haltingly suggest. First of all, don't be too sure in your diagnosis. All human knowledge is imperfect, and if we were both to assume in our attitude to certain doubtful cases that represented in the charge-sheets of one of the great London specialists, it would be better for both ourselves and our patients. A recently appointed surgeon to the hospital found the case-sheets of the patient sent into his ward marked, usually, with a rough preliminary diagnosis made by the interne in the receiving-room. This, in most cases, would indicate whether the case were medical or surgical, abdominal or thoracic, etc. Most of them were easy to decipher, but he found not infrequently case-sheets in which the blank space for diagnosis was filled in with the letters G. O. K. He puzzled considerably over this for some days, and did not like to ask what was the meaning of it, thinking it was some contraction for, or initials of, some well-known disease which he ought to be able to recognize, like the contractions in common use there of "T. D." for tabes dorsalis, "D. T." for delirium tremens, "G. P. I." for general paralysis of the insane, etc.; but "G. O. K." would not fit any known disease or combination, and finally he put his pride in his pocket and asked. "Oh," said the interne, "that is a little way that has been in vogue at this hospital for a number of years. I don't know

who started it, sir. Whenever we cannot make out for the life of us in the short time at our disposal what is the matter with a patient we simply write on the sheet G. O. K .- God Only Knows-and leave it to you, sir." Next, do not be too precise. Precision, of course, is the soul of discipline, and obedience, you have been told, is the chief virtue of a nurse. As a matter of fact it is not; intelligence and good judgment are worth ten of it, and every doctor will thank you to do your own thinking and as much of his as he finds you ought to be trusted to, but this absolute Chinese, Prussian drill-sergeant idea of precision, may easily be carried to extremes. I have known both nurses and patients to be seriously distressed because medicine which was to be given every three hours happened to be administered on one or two occasions four and a half or even five minutes after the hour. The solicitude for the remedy to be administered just at the precise stage of the moon or sun indicated upon the charge-sheet reminds me of the story which is told of the good lady travelling through Central New York, who, no sooner had she got fairly settled with all her wraps and bundles in the train than she beckoned to the conductor and begged him to be sure and let her know when they came to Poughkeepsie. "Oh, ves," answered the conductor, "do not worry, I will let you know in plenty time." After an hour passed she again beckoned him and urged him not to forget and let her know when she got to Poughkeepsie. This was repeated four or five times during the morning, much to the poor conductor's bewilderment, but, as such things sometimes go, when they got to Poughkeepsie there were important orders waiting which he had to leap from his train to secure, and got back barely in time to blow the whistle for its departure, and he forgot all about the old lady until the train had gone half a mile down the track beyond the town. He was so mortified when he recollected that he promptly rang the bell and backed up to the station again, then slipped through to the old lady to tell her that at last they had reached Poughkeepsie, and couldn't he help her off with her package. "Oh, thank you," said the old lady, "but I am not going to get off. The doctor told me to take a pill when I got to Poughkeepsie."



HENRY WATTERSON is responsible for the suggestion that Mr. Roosevelt will retire from the presidency of the United States to the presidency of Harvard College. Happy thought! then we shall have a nursing college.